

The Hardwoods of Australia and their Economics. By R. T. Baker. Pp. xvi+522+plates. (Sydney: The Technological Museum.)

Alternating Current Work: An Outline for Students of Wireless Telegraphy. By A. Shore. Pp. ix+163. (London: The Wireless Press, Ltd.) 3s. 6d. net.

Telephony without Wires. By P. R. Coursey. Pp. xix+414. (London: The Wireless Press, Ltd.) 15s. net.

## DIARY OF SOCIETIES.

### THURSDAY, DECEMBER 11.

ROYAL SOCIETY, at 4.30.—C. F. U. Meek: A Further Study of Chromosome Dimensions.—J. M. H. Campbell, C. G. Douglas, and F. G. Hobson: The Respiratory Exchange of Man During and After Muscular Exercise.—Dr. A. D. Waller: The Energy Output of Dock Labourers during Heavy Work.—C. H. Usher: Histological Examination of an Adult Human Albino's Eyeball, with a Note on Mesoblastic Pigmentation in Fetal Eyes.—J. Gray: The Relation of Spermatozoa to Certain Electrolytes, II.

LINNEAN SOCIETY, at 5.—Prof. W. A. Herdman: Notes on the Abundance of Marine Animals and a Quantitative Survey of their Occurrence.—J. B. Gatenby: The Fertilisation of the Calcareous Sponges.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Sir Charles A. Ballance: The Surgery of the Heart (Bradshaw Lecture).

ROYAL INSTITUTE OF PUBLIC HEALTH, at 5.—Dr. H. H. Thomson: The Diagnosis and Treatment of Tuberculosis in Relation to Public Health.

MATHEMATICAL SOCIETY (at Burlington House), at 5.—Major P. A. MacMahon: Permutations, Lattice Permutations, and the Hypergeometric Series.—L. J. Mordell: The Generating Function of the Series  $\sum F(n)x^n$ , where  $F(n)$  is the Number of Uneven Classes of Binary Quadratics of Determinant  $-n$ .—H. Steinhilber: Fourier Coefficients of Bounded Functions.—D. Priabandrinsky: Steady Fluid Motions with Free Surfaces.

INSTITUTION OF ELECTRICAL ENGINEERS (at the Institution of Civil Engineers), at 6.—Capt. J. M. Scott Maxwell: Scientific Management—A Solution of the "Capital and Labour" Problem.

OIL AND COLOUR CHEMISTS' ASSOCIATION (at 2 Furnival Street, E.C.), at 7.—The Principle of Application of Paint and Varnish, and How it Affects the Works Chemist of the Paint and Varnish Industry.

OPTICAL SOCIETY, at 7.30.

INSTITUTION OF AUTOMOBILE ENGINEERS (Graduate Section) (28 Victoria Street), at 8.—Debate: Worm *v.* Bevel Drive.

ROYAL SOCIETY OF MEDICINE (Neurology Section), at 8.30.—Certain Late Effects of Injuries of the Nervous System.

### FRIDAY, DECEMBER 12.

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH.—Conference of Research Organisations (at Institution of Civil Engineers), at 2.30.—Rt. Hon. A. J. Balfour: Introductory Address.—H. J. W. Bliss: Research Associations and Consulting Work and the Collecting and Indexing of Information.—Dr. W. Lawrence Balls: The Equipment of Research Laboratories.

ROYAL ASTRONOMICAL SOCIETY, at 5.—Prof. Eddington and Others: Consideration of the Theory of Relativity.

PHYSICAL SOCIETY OF LONDON, at 5.—Prof. W. M. Coleman: First Steps in the Experimental Analysis of a Galvanic Cell.—J. W. T. Walsh: Radiation from a Perfectly Diffusing Circular Disc.—Dr. N. W. McLachlan: A Comparative Method of Testing Thermionic Valves for Passing No Reverse Current at High Voltages.—Dr. A. O. Rankine: Recording and Reproducing Sounds by Means of Light.

ROYAL SOCIETY OF MEDICINE (Clinical Section), at 5.

MALACOLOGICAL SOCIETY OF LONDON (at the Linnean Society), at 6.—Rev. Dr. A. H. Cooke: An Abnormality of Structure in the Radula of Certain Rhachiglossate Mollusca.—H. Watson: The Affinities of Prymidula, Acanthinula, and Vallonia.

### MONDAY, DECEMBER 15.

INSTITUTION OF ELECTRICAL ENGINEERS (Informal Meeting) (at Chartered Institute of Patent Agents), at 7.—R. Rankin and Others: Discussion on Some Reflections on Labour.

FARADAY SOCIETY (at the Chemical Society), at 8.—Lieut. W. A. Macfadyen: Electrolytic Iron Deposition.—A. G. Tarrant: The Measurement of Physical Properties at High Temperatures.—J. G. Williams: The Electrolytic Formation of Perchlorate from Chlorate.—Prof. A. W. Porter: The Vapour Pressures of Binary Mixtures.—S. Horiba: Some Relations between the Solubilities of Solutes and their Molecular Volumes.—Dr. E. J. Hartung: (1) An Accurate Method for the Determination of Vapour Pressure; (2) Some Properties of Copper Ferrocyanide.—Prof. E. D. Campbell: The Solution Theory of Steel and the Influence of Changes in Carbide Concentration on the Electrical Resistivity.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.—S. Perks: London Town-Planning Schemes in 1666.

ROYAL SOCIETY OF ARTS, at 8.—Dr. J. T. Hewitt: Synthetic Drugs (Cantor Lecture).

SURVEYORS' INSTITUTION, at 8.—Discussion on The Future of the Institution.

ROYAL GEOGRAPHICAL SOCIETY (at the Æolian Hall), at 8.30.—Capt. E. H. Keeling: In Northern Anatolia, 1917.

### TUESDAY, DECEMBER 16.

ROYAL SOCIETY OF MEDICINE, at 5.—General Meeting of Fellows.

ROYAL STATISTICAL SOCIETY, at 5.15.—J. E. Allen: Some Changes in the Distribution of the National Income during the War.

INSTITUTION OF PETROLEUM TECHNOLOGISTS (at Royal Society of Arts), at 5.30.—A. J. Wilson: The Application of Liquid Fuel to Heavy-Oil Engines.

INSTITUTION OF CIVIL ENGINEERS, at 5.30.—Major E. O. Henrici: Precise Levelling.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Technical Meeting), at 7.—N. E. Luboshez: Fancy Lighting in Portraiture.

ILLUMINATING ENGINEERING SOCIETY (at Royal Society of Arts), at 8.—Capt. W. A. Howells: The Art of Camouflage.

### WEDNESDAY, DECEMBER 17.

SOCIETY OF GLASS TECHNOLOGY (at Institute of Chemistry), at 2.—J. Connolly, Dr. M. W. Travers, and Dr. W. E. S. Turner: The Position of the Glass Industry in America.

ROYAL UNITED SERVICE INSTITUTION, at 3.—Major-Gen. Sir Lewis Jackson: Possibilities of the Next War.

ROYAL SOCIETY OF ARTS, at 4.30.—C. Grunwald: The Present Economic Position of Russia, and Some Aspects of its Future Development.

ROYAL METEOROLOGICAL SOCIETY, at 5.—F. J. W. Whipple: The Laws of Approach to the Geostrophic Wind.—G. M. B. Dobson: Winds and Temperature Gradients in the Stratosphere.—Capt. C. J. P. Cave: Quotations from the Diary of Samuel Pepys on the Weather.

GEOLOGICAL SOCIETY OF LONDON, at 5.30.—Secretary of State for the Colonies: An Earthquake at Rabaul in May, 1919.—R. R. Lempiere: The Raised Beach at South Hill (Jersey).—Prof. S. J. Shand: A Rift-Valley in Western Persia.

INSTITUTION OF ELECTRICAL ENGINEERS (Wireless Section) (at Institution of Civil Engineers), at 6.—Prof. G. W. O. Howe: High-Frequency Resistance of Wires and Coils.

ROYAL MICROSCOPICAL SOCIETY (at the Northampton Polytechnic Institute), 7.30-10.30.—Conversazione.

### THURSDAY, DECEMBER 18.

ROYAL SOCIETY OF ARTS, at 4.30.—P. J. Hartog: Some Problems of Indian Education.

INSTITUTION OF MINING AND METALLURGY (at Geological Society), at 5.30.—Adjourned Discussion on A Contribution to the Study of Flotation, H. L. Sulman.

INSTITUTION OF ELECTRICAL ENGINEERS (at Institution of Civil Engineers), at 6.—D. M. W. Hutchison and W. J. Wayte: Electricity in Tin Mining.

ARISTOTELIAN SOCIETY (at 22 Abemarle Street), at 8.—Dr. G. E. Moore: External and Internal Relations.

CHEMICAL SOCIETY, at 8.—Prof. J. Walker: War Experiences in the Manufacture of Nitric Acid and the Recovery of Nitrous Fumes.

### FRIDAY, DECEMBER 19.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—G. W. Burley: Cutting Power of Lathe Turning Tools, Part II.

### SATURDAY, DECEMBER 20.

PHYSIOLOGICAL SOCIETY (at St. Thomas's Hospital), at 4.30.

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